

AMENDMENT

In the Specification

Please replace the paragraph beginning at page 4, lines 9-15, with the following rewritten paragraph:

E1  
- Figures 1A-C show inward currents evoked by high  $K^+$ , 5HT and ACh in RNA-injected oocytes. (A)  $I_{hk}$  and  $I_{5HT}$  in an oocyte injected with atrial RNA + 5HT1A-R RNA. Holding potential in this and all following figures was -80mV. (B) Inward currents evoked by ACh (AcCHO) and 5HT in a single oocyte in hK solution. (C) The dependence of  $I_{5HT}$  amplitude on 5HT concentration in oocytes of one frog. In each oocyte, the response to one 5HT concentration was tested. Data represent mean $\pm$ SEM in 4-6 cells at each concentration.-

Please replace the paragraph beginning at page 4, lines 16-26, with the following rewritten paragraph:

E2  
- Figures 2A-D depict that  $I_{hk}$  and  $I_{5HT}$  are inwardly rectifying  $K^+$  currents. (A) Currents evoked by voltage steps from the holding potential of -80 mV to voltages between -140 and 40 mV in 20 mV steps in ND96(a), hK (b), hK in the presence of 5HT (c). Net  $I_{5HT}$  (d) was obtained by digital subtraction of (b) from (c). (B) Current-voltage relations of the total membrane current in a representative oocyte in NG 96 (2 mM  $[K_{out}]$ ;  $\square$ ), in 25 mM  $[K^+_{out}]$   $\blacklozenge$ ; in 75 mM  $[K_{out}]$   $\circ$ , and in hK (96 mM  $[K_{out}]$ ;  $\blacktriangle$ ). (C) Current-voltage relation of the net  $I_{5HT}$  in the same oocyte as in (B) in 25 mM  $[K_{out}]$   $\blacklozenge$ ; 75 mM  $[K_{out}]$   $\circ$ , and 96 mM  $[K_{out}]$   $\blacktriangle$ . (D) The dependence of the reversal potentials of total membrane current  $\blacktriangle$  and of  $I_{5HT}$   $\bullet$  on  $[K_{out}]$ . The straight lines represent least square fits to data (mean $\pm$ SEM, n=3 for each point).-

Please replace the paragraph beginning at page 4, lines 27-28 and page 5, lines 1-6, with the following rewritten paragraph:

E3  
- Figures 3A-D depict the  $Ba^{2+}$  block of  $I_{hk}$  and  $I_{5HT}$ . (A-C) show records taken from the same oocyte at 10 min intervals. Between the records, the cell was bathed in ND96. 5HT concentration was 4 nM. Note that in (B) 300  $\mu$ M  $Ba^{2+}$  reduces  $I_{hk}$  and almost completely blocks  $I_{5HT}$ .  $Ba^{2+}$  and 5HT were washed out simultaneously, and this resulted in an inward current "tail". (D) dose dependence of  $BA^{2+}$  inhibition of  $I_{hk}$  in native oocytes  $\circ$ ,  $I_{hk}$  in RNA-injected oocytes  $\bullet$ ,  $I_{5HT}$  in RNA-injected oocytes  $\nabla$ . Data are mean $\pm$ SEM, n=3 to 7 for each point.-